

**CROWD SOURCING APPROCH TO RECOMMEND
TRIPS BASED ON THE POINT OF INTERESTS USING
MAHCINE LEARNING**

Denusha Shalini De Silva

A dissertation submitted in partial fulfilment of the requirement for
Bachelor of Engineering (Honours) degree in Computer Science

Department of Computing

Informatics Institute of Technology, Sri Lanka

in collaboration with

University of Westminster, UK

2020

Abstract

The tourism industry performs a major role in national and countryside economies. Attracting more tourists to the country has continually been a quintessential situation for governments. This research paper aims to introduce a design a mobile web application for tourists or travelers to reduce their difficulties while they travel. The existing applications are reviewed first to discover the failures and the frequent features will be merged and develop a new mobile application with new features.

The problem was identified as the trip planning problem by the literature reviews done from the latest existing researches and identify how the people face problems while creating trips. This research has followed Iterative methodology and PRINCE2 has selected as the project management methodology.

A manual dataset was created for the development an accuracy purpose. This mobile web application was basically to recommend trips by adding services into this application according to the Points of Interests. The hotel and transport services will be trained from the machine learning model and recommended it to the user. The selected algorithm was Random Forest classifier because it had the highest accuracy between Support Vector Machine and K-Nearest Neighbors. Black box testing was done in design, structure and the implementation of the functionalities. Finally, the self-evaluation and evaluation by the technical experts were done by using questionnaires.

Keywords: POI, Recommending System, Mobile Web Application. Machine Learning